

A STUDY OF THE MARKETING PROBLEMS OF  
AND OPPORTUNITIES FOR THE  
CIVIL AVIATION ADMINISTRATION  
OF CHINA ( CAAC )

by

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## CHAPTER I

### INTRODUCTION

The Civil Aviation Administration of China (CAAC), the only airline company of the People's Republic of China, has drawn much attention from the public recently.

On the one hand, since China's open door policy in 1979, the demand for domestic and international air travel has increased dramatically. This means many significant business opportunities for suppliers to the airline and aircraft industries in China.

The complex but poor reservation system, frequent flight delays, as well as the many serious accidents in recent years, on the other hand, have become "the unwelcome talk of the town."

In this research paper, it is hoped to study, first: how a state-owned airline company runs in a "socialist" country, and the strategies it employs to meet the challenges associated with "capitalist" economies; and second, through secondary data research, interviews, and a survey among travelers to find out the marketing picture that CAAC presents to their eyes -- aircraft condition, in-flight services, etc. Based on these findings, decision-oriented recommendations will be offered.

Before going on to a discussion of the problems, some understanding of the CAAC organization would be of significant value. This is because CAAC is not just an ordinary airline (like JAL or UAL), but, rather, is a bureau of the State Council of China. Resembling Aeroflot, the state airline of Soviet Russia, CAAC acts not only as a commercial airline, but also (as its name suggests) as the administrator of all civil aviation matters, from airport operation to "flying doctors" for emergencies. Thus, the structure of CAAC will be examined first.



## History, Development And Organization of CAAC

At the end of the war between the Nationalists and the Communists in China in 1949, there were only 17 operational transport planes left on the mainland, and little maintenance equipment and few spare parts were available for their reconditioning.

In 1950, under the auspices of the new Communist government and with assistance from Russia, reestablishment of civil aviation began. The Civil Aviation Bureau (CAB) was first set up to oversee the provision of air transport services and two separate air-carriers were established in the spring of 1950. They were: Sovetsko-Kitaysko Aktsionernoe Obshestvo Grazhdanskoi Aviatsii (SKOGA), which was a jointly owned Sino-Soviet company; and China Civil Aviation Corporation (CCAC), solely owned by the Chinese Government.

The CAB abolished CCAC in July 1952 and replaced it with Chinese People's Aviation Corporation (CPAC), which then flew most of the domestic routes. In March 1954, however, CAB abolished CPAC by directly taking over its assets. Finally in 1954, the CAB became the Civil Aviation Administration of China (CAAC), and was directly responsible to the State Council.

In December of the same year, under the agreement with the Russian government, CAAC officially took over SKOGA's planes and operations, integrating all services and routes into a single state-owned airline. The administrative control of CAAC was still further shuffled back and forth several times from a special agency to the Ministry of Communications. Finally, in 1962, it was came under the General Bureau of Civil Aviation (GBCA, or CAAC as it is commonly known).



Like the Soviet airline Aeroflot, the Chinese government wraps the responsibility for all civil aviation activities into one agency. Therefore, CAAC is the administrator and policy maker, and provides and operates the airports, navigational aids, and maintenance facilities. It supervises not only the commercial route system but also service-type flying for the agriculture, forestry, and fishing industries, the "flying doctor" and "flying ambulance" services, and the transportation of mail and supplies to remote regions.

Although no official organization chart of CAAC could be accessed, its organization is believed to be much like that of the Soviet Ministry of Civil Aviation and its airline, Aeroflot. Whereas the Soviet Ministry has a territorial administration for every Republic, CAAC has only six, which they refer to as the Air Region Administration Organizations (ARAOs), or Regional Management Bureaus.

The six regional management bureaus are found in Beijing, Shanghai, Guangdong, Chengdu, Shenyang and Lanzhou. Each of these covers several provinces and is responsible for all the local scheduled and non-scheduled flights and supporting services in its area, such as line maintenance, fueling, and the operating of the airfields, plus servicing the trunk route airplanes, and operating special service flights.

In September 1985, the State Council decided to allow new airlines to assume CAAC's former function as the sole national airline, while CAAC became a regulatory agency with jurisdiction over civilian air operations in China. Thus CAAC would still continue to supervise pilots, planes, routes, fares, and airports; and approve aircraft and equipment purchases.



According to the new regulations, two types of airline companies took CAAC's place in the airline business. First are the regional airline companies which evolved out of CAAC's six ARAOs. They continue to operate most of CAAC's routes, using former CAAC aircraft, although CAAC would no longer include planes or other equipment bought by the regional bureaus in its assets. The regional airlines might form ventures with other organizations and indeed several have already done so.

The six, their regional headquarters, and emerging structure are as follows:

- (1) Air China (Beijing) - it operates most of China's international routes for the time being, and some other major domestic routes.
- (2) China Eastern (Shanghai) - a joint venture between CAAC and the Shanghai Municipality.
- (3) China Southern (Guangzhou)
- (4) China Southwestern (Chengdu) - a joint venture between CAAC, Sichuan and Guizhou provinces.
- (5) China Northern (Shenyang)
- (6) China Northwestern (Lanzhou)

In addition to these six regional carriers, "local" airlines could also be formed with approval from CAAC, to operate new passenger and cargo routes based on need. So far some have received a preliminary approval, and many more are waiting.

It is important to note that, owing to unknown reasons, such a restructuring has not yet been completed and definitive news concerning it, so far, not been publicly announced. They have not done any work on the painting of the aircraft, and the name CAAC is still commonly used worldwide.



### CAAC'S Aircraft

As previously mentioned, China's civil aviation started with only 17 operational planes left behind by the Nationalists. In 1950, SKOGA began its flights with some Soviet Li-2, Ilyushin-12 and Ilyushin-14 aircraft, and some of these models are still in use today. CCAC, on the other hand, started its scheduled operations with about 26 U.S.-built aircraft, DC3s, C46s and C47s, only half of which were operable.

In late 1959, the airline obtained a number of IL-18 turboprop aircraft from the Soviet Union to replace some of the aging Il-12 and IL-14 transports. An important break in the pattern of total dependence on Soviet equipment occurred in 1961 when six Vickers Viscount turboprops were purchased from Great Britain. Purchases of the Soviet Il-62 airliners moved China into jet propulsion in the 1960s. Although a relatively small number of foreign aircraft were purchased during the first two decades, they were adequate for the limited amount of civilian air travel in those years.

By the early 1970s, however, China began to take commercial air transport modernization seriously: CAAC purchased some 39 new and used Tridents followed by several large orders from Boeing between 1972 and 1982. In 1985, CAAC also bought three Airbus passenger planes from France, ten British Aerospace aircraft, and a number of Soviet Tupolev-154M airliners.

The same year, the U.S. firm, McDonnell Douglas, not only sold its MD-80 series aircraft, but also signed an agreement with Shanghai Aviation Industrial Corporation(SAIC) for the purchase and assembling of 26 MD-82 airliners by 1991, with an option for 15 more. Obviously, most of these MD-82s will be made for CAAC.



Besides the purchases of foreign airliners from the Soviet Union and Western countries, China also manufactured its own airliners for CAAC. The Ministry of Aviation Industry (MAI) now manufactures several commercial aircraft which includes Yun-5, Yun-6, Yun-7, Yun-7-100, Yun-8, Yun-9, Yun-10, Yun-11, and Yun-12; and twenty types of engines - both piston and turbojet.

This civilian aircraft and engine production take place in several large plants throughout the country, especially in Shanghai, Xian, Harbin, and Shenyang. Most of these aircraft are manufactured strictly by China, while some are joint ventures, or with have help from the outside world, including McDonnell Douglas, and the Hong Kong Aircraft Engineering Company.

At present, China's civil fleet consists of about 150 planes of some 40 different types from various countries. Such a varied assortment of aircraft is unquestionably difficult to maintain under any circumstances, but the problem is further compounded by the fact that many of these planes are old and inefficient.

As a consequence, CAAC's average plane productivity is low compared with other world airlines. If CAAC continues to retire its aircraft after 20 to 30 years, most of the planes currently in operation will be out of service by the year 2000, leaving about 35 of today's aircraft in operation.

According to the estimate of Adam M. Pilarski, chief economist at Douglas Aircraft Company, CAAC's existing fleet --minus anticipated retirements and including the firm orders for new aircraft as of early 1987 -- falls far short of satisfying China's needs. To satisfy demand, the CAAC fleet must grow to an estimated 500 small to big planes by the year 2000, and about half of them will have to be purchased or leased from abroad.



### Transport Services Of CAAC

It appears that CAAC routes are set up by the GBCA headquarters, which consults with the regional directorates and provincial governments in planning local services. Actual flights on the trunk and local routes, including major maintenance, are administered by the ARAOs.

CAAC's civil air routes totaled only 11,387 km in 1950 serving about 5 cities. The airline showed a mere 1.58 tonne-kilometers and carried 10,000 passengers; in 1985 its output was 1.27 billion tonne-kilometers and it carried about 7.4 million passengers. In recent years, the airline's growth has gathered pace. Between 1981 and 1985 the carrier grew at an annual average rate of 24%; in 1986 and 1987 the growth rate was around 30% and reached to 12.8 million passengers in 1987.

It is predicted that the domestic traffic will continue to grow at double digit rates for the remainder of the century. According to this forecast, China's domestic air traffic in the year 2000 will be more than five times greater than in 1985. But the size of this increase should be put into perspective because of China's vast size and its population of 1.1 billion. Even this level of growth will amount to only 12.5% of the projected air traffic in the Soviet Union in the year of 2000, and less than 5 percent of the level in the United States.

On international routes, China's self-imposed semi-isolation and the lack of long-range aircraft have caused its international routes to develop much more slowly than the domestic routes. In the 50s and 60s, CAAC only flew to China's Communist neighbors -- the USSR, North Korea, North Vietnam, and some nonscheduled routes to the Mongolian Republic.



Apparently CAAC preferred to let airlines of other countries provide its international services until the 1970s. During the 1970s, especially after the open door policy in 1979, China began to become actively involved in international flights. In the period of 1972 to 1985, international travel increased almost 240 times, or more than 50% annually. In all these flights, China no longer played a passive role, but an active and vital role.

Today, CAAC offers about 845 scheduled flights a week, of which 735 are domestic between 86 cities, 34 between Hong Kong and 6 major mainland cities and 58 international flights with 31 cities outside the mainland. This figure is quite impressive when compared with the 1960s or 1970s, nonetheless, such a capacity is still behind the normal operation of Hong Kong. When contrasted with the 1,200 scheduled flights a week at Kai Tak International Airport, the China total of 845 is only 70% of that. Moreover, the majority of the flights in Hong Kong are with big jets, while in China most of them are medium-sized.

Concerning the load factors (the measure of how many plane seats are filled on average), CAAC's load factors have been substantially higher than many other comparable airlines in the past few years. In 1988, most CAAC routes were believed flown at 70% - and in some cases more than 80 % - of capacity, showing the difficulty of CAAC in meeting the rapid increases in demand. Although high load factors are profitable, they do not necessarily maximize profits. Experts have told us that such high load factors while they seem to suggest success, can also mean a straining of resources, including turning away passengers. It is hoped that, as estimated by an aviation analyst, the load factor could be dropped to 65% by year 2000.



## CHAPTER II

### LITERATURE REVIEW

The marketing problems of and opportunities for any company may be investigated through the perspectives of the four P's of the marketing mix: product, price, place and promotion (Kotler & Bagozzi). In a service industry like airlines, however, service and people should also be considered.

But: how to determine whether an airline is a successful one? Many academicians as well as practitioners would say that the focus should be on giving customers the highest satisfaction, then comes profits (which must come from it). Therefore, the main focus should be on how to make passengers satisfied through manipulating the marketing mix.

In this paper, the matters to be explored are the importance of the factors towards the satisfaction of a passenger in flying, and how well CAAC is doing to satisfy the needs of passengers.

For many years, Advertising Age magazine (Goldsborough 1985, 1987) has been doing surveys among its frequent-flyer readers to select the best airlines in the United States. The basic criteria used are: convenience, overbooking, baggage handling, cleanliness of equipment, attitudes of personnel, safety procedures, on-board services, seating configurations and frequent-flyer programs.

Institutional Investor magazine (Anonymous 1984; Bent, 1985; and Reamy, 1986) has also conducted surveys among bankers about which airline is the best in providing service - using six items that they consider crucial: meals/beverage service, helpful flight attendants, helpful ground personnel, on-time performance, cabin cleanliness and sleeperette seats.



Goldsmith (1985), the Executive Vice President of China Travel Management USA Ltd., mentioned that speed, reliability, convenience, safety, cost and comfort are the most vital factors to consider when traveling in a foreign country, like China.

Combining the aforementioned survey findings with personal judgment, we believe that the following factors are crucial to the overall satisfaction of a passenger in flying (A schematic diagram is depicted in Figure 1):

\* (1) Service Quality:

This means the services rendered from the time you buy a ticket till you take off from the airport. It includes the attitude and effectiveness of the ground personnel and the flight attendants. (It does not for these purposes include the reservation system, which is treated separately below);

\* (2) On-time performance;

\* (3) Safety:

This includes the perception of safety, as well as the technical structural soundness of the aircraft, the skill of the pilots, and the actual safety record;

\* (4) Flight schedule convenience:

Ease of getting a flight at the convenience of the passenger's schedule;

\* (5) Price:

"Fairness" of the price charged for the services rendered; and

\* (6) Reservation System:

Ease of reserving and booking a ticket, and also the way one actually gets the ticket.

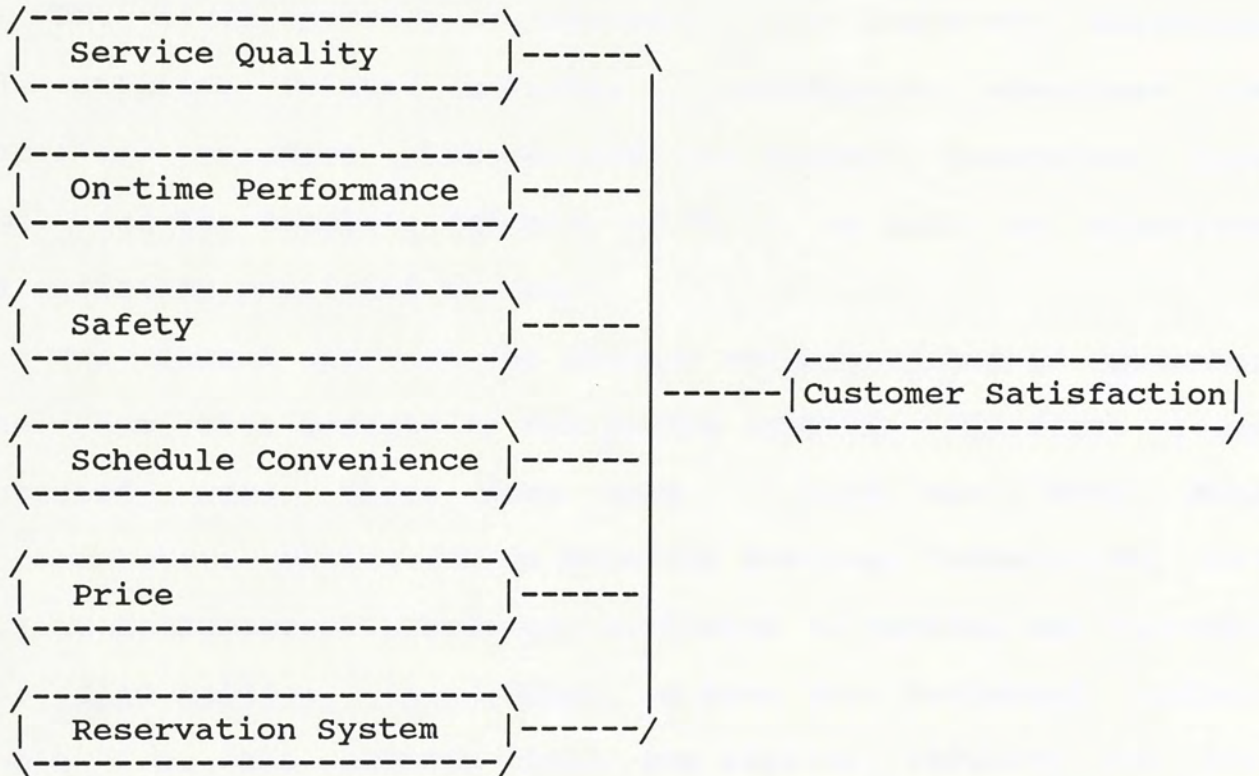


FIGURE 1

SCHEMATIC DIAGRAM OF THE FACTORS WHICH CONTRIBUTE  
TO THE SATISFACTION OF A PASSENGER IN FLYING



## CHAPTER III

## METHODOLOGY

In order to get a more comprehensive picture of how CAAC is doing in various aspects to satisfy passengers (so as to find out the problems of and opportunities for them), three different research approaches were adopted.

The first approach was secondary data research: examining and analyzing related articles in newspapers, magazines and journals, including publications from Western countries, Hong Kong, and the People's Republic of China, as well as pamphlets and magazines published by CAAC.

The second approach was through correspondence or personal interviews with experts in the fields related. The first group contacted were those from CAAC -- both the Hong Kong representative office (China Aviation National Corporation) and Beijing Headquarters. However, we failed to receive any response from CAAC Beijing. In addition, we have also contacted various people from the academic field; the airline industry and its associations; and advertising and travel agencies.

The third approach was a questionnaire survey among travelers in Hong Kong. In order to get a meaningful analysis, besides measuring how CAAC was doing on the various factors mentioned, we also measured Cathay Pacific as a contrast.

The data were collected over a three-week period in 1989 (Feb 20 to Mar 4). Because no previous research of this type was uncovered, nor any subsequent extension of the research executed for this paper, the study was essentially snapshot (or cross-sectional) in nature.



The population was defined as all individual travelers who were going to take a plane to China in the near future and who had traveled at least three times in 1988, with at least two different airlines. Of all trips the respondents have taken, at least two of them were to, from or within China. We wanted, then, only frequent travelers whose experience could provide valid responses.

Convenience sampling was used. Seven interviewers were hired and trained to conduct such a survey. They went to the Hong Kong Kai Tak International Airport during the period cited and approached passengers who were waiting to take their flight to China by CAAC or Cathay Pacific. The desired sample size was 200, of which 50% were to be non-Hong Kong residents.



### Questionnaire Design

Based on the literature review, findings from focus groups, and some expert opinions, a five-page structured questionnaire was designed (Appendix I). Before the launching of the large scale survey, a pilot study was done. After consideration of suggestions from Dr. Neil Holbert, the questionnaire was finalized after three revisions.

The questionnaire was divided into four main sections.

The first section comprised four screening questions to make sure the passenger is qualified to be a target respondent.

The second section consisted of five unaided open-ended questions, asking respondents to name the best and the worst airlines; and the best and the worst air trips to, from, or within China. The last question is about respondents' general problems encountered in flying to, from, or within China.

The third section was designed to measure the importance of each aforementioned factor when a passenger chooses an airline. Respondents were also asked to rate how they perceived CAAC and Cathay Pacific on all these criteria. Balanced 4-point Likert scales were used for respondents to indicate their opinion towards each criterion. Even-number categories without neutral options were used, because of a long-held philosophical belief that people will prefer, whenever possible, to give a neutral answer.

The final section solicited classification data. Interviews averaged about ten minutes.



## CHAPTER IV

## FINDINGS

Basic Information

A total of 174 usable interviews were ultimately tabulated for this analysis. Basic information about the respondents is shown in Tables 1 and 2.

TABLE 1  
BASIC INFORMATION ABOUT THE RESPONDENTS

	<u>Number</u>	<u>Percentage</u>
<u>Sex</u>		
Male	152	88
Female	22	12
<u>Nationality</u>		
Hong Kong	92	53
American	29	17
European	20	12
PRC Chinese	7	4
Other Countries	26	14
<u>Age</u>		
Below 25	9	5
25 - 34	68	39
35 - 44	54	31
45 - 54	27	16
55 - 64	10	6
Above 64	5	3
<u>Annual Income *</u>		
Less Than HK\$ 80,000	18	11
HK\$ 80,000 - HK\$ 199,999	51	32
HK\$ 200,000 - HK\$ 399,999	42	26
HK\$ 400,000 - HK\$ 599,999	28	17
HK\$ 600,000 or more	22	14
<u>Occupation</u>		
Manager	66	38
Entrepreneur	28	16
Professional	25	14
Technical	13	8
Other	42	24
<u>Purpose of Most Travel</u>		
Business	155	90
Vacation	9	5
Visit friends/relatives	6	3
Conference	3	2

\* Note: \$HK 7.80 = \$US 1.00



TABLE 2  
FREQUENCY OF TRAVEL

		Mean -----
Times traveled by Plane in 1988		19
* <u>More than:</u>		
5 times	80%	
10 times	56%	
20 times	26%	
50 times	10%	
Times traveled between Hong Kong & China in 1988		10
* <u>More than:</u>		
5 times	57%	
10 times	28%	
20 times	10%	
Number of different airlines traveled in 1988		4
* <u>More than:</u>		
3	31%	
5	13%	

From the above, we can clearly see that half of the respondents are Hong Kong citizens; Americans and Europeans make up the majority of the balance. Most of the respondents are men and they were going on a business trip. 85% of the respondents are within the age range of 25 to 55 and are either business owners or in the senior management level.

Most respondents are very frequent travelers, with 10% of them even traveling more than 50 times in 1988. Interesting to know, half of these trips were between HK and China. Respondents traveled on an average of 4 different airlines in 1988.



### Factors that Influence Passengers In Choosing an Airline

In order to get information concerning the importance of the factors which influence a passenger in choosing an airline, we directly asked the respondents to rate the importance of the aforementioned factors. A summary is given in Table 3.

TABLE 3  
MEAN VALUE OF THE FACTORS

( From 1 = Very Important, to 4 = Very Unimportant )

	Mean	< 2.5
	-----	----
Safety	1.07	*
Punctuality	1.22	*
Ease of Reservations	1.53	*
Flight Schedule	1.60	*
In-Flight Service	1.86	*
Cabin Cleanliness & Tidiness	1.90	*
Ground Service	2.02	*
Meals and Drinks Services	2.07	*
Price	2.33	*

\* denotes the corresponding mean is significantly less than 2.5 at  $p = 0.05$

From Table 3, we can see that respondents consider all factors to be important because all their mean values are around 1 to 2 and are significantly less than 2.5. When choosing an airline to fly, safety is considered as the most vital factor, followed by punctuality. Price, on the hand, is considered as the least important one. This may due to the fact that most business trips are traveled on company expenses.

Safety here probably is a blend of perception and factual record. Whatever, the implication to any airline is that first and foremost it must keep a high and sound safety record, or they will easily drive their customers away .... at least on this route.



The next factor, punctuality, is also important to them. To every businessperson, time is money. They want to be on time for all business appointments.

Following safety and punctuality, ease of reservations and schedule convenience come next. These factors are important because businessmen want flying to be simple and to suit their time schedules, rather than the other way around.

The next group is various services and cabin cleanliness and tidiness. Besides getting to their destination safely, on time and with less effort before the flight, passengers then seek for pleasure during the flight -- good services and nice environment. With airlines, safety, punctuality, ease of reservation and schedules are so basic that they are really something like sine qua nons. It is perhaps in the services and in in-flight environment that a major competitive edge for an airline can be sought .. something unique, good, and advertisable.

Do HK people share similar opinions with the others? Table 4 shows us that Americans, Europeans and HK people are basically the same, except that HK people are less price conscious but request a higher standard of meals and drinks.

TABLE 4  
COMPARISON BETWEEN HK, US AND EUROPEAN RESPONDENTS  
( From 1 = Very Important, to 4 = Very Unimportant )

	H.K. -----	American -----	European -----
Safety	1.08	1.10	1.10
Punctuality	1.24	1.24	1.25
Ease of Reservation	1.51	1.45	1.55
Flight Schedule	1.54	1.66	1.45
In-Flight Service	1.76	1.86	2.10 *
Cabin Cleanliness & Tidiness	1.86	1.79	2.00
Meals and Drinks Services	1.96	2.34 *	2.26 *
Ground Service	2.04	2.03	2.05
Price	2.50	2.03 *	2.20

[\*] denotes significant differences at the level of 0.05.



Problems Encountered When Flying To, From Or Within China

Besides asking respondents to rate the importance of various factors, we also used open-ended questions to ask the respondents to list their most encountered problems when traveling to, from, or within China. A summary of the findings is given in Table 5.

TABLE 5  
A SUMMARY OF RESPONDENTS' MOST ENCOUNTERED PROBLEMS

Punctuality (Delay, Flight Change & Cancellation)	93
Reservations	72
Various services (Includes Ground & In-Flight Services)	39
Food & Beverage	12
Flight Schedule	8
Plane Condition	5
Airport Condition	5
Safety	3

From Table 5, we can see that punctuality is the most mentioned problems in China travel. The contributing factors are delays, flight cancellations, and changes (of aircraft or whatever), often sudden.

Safety, to most respondents, however, is not a problem in China flying. It is most important as a factor in choosing an airline, but it does not come up high as a volunteered problem in flying to, from, or within China. It might be said that once having assessed an airline on the element of safety, it is put well back into the recesses of the flier's mind, as he copes with many more immediate business-oriented issues as problem.

Reservations have always been a headache in China traveling because it is seldom an easy job to get a ticket; the situation is even worse when traveling the domestic routes in China. These problems will be discussed in detail in the coming chapters.



### Rating Of CAAC

How well is CAAC currently doing? How do people perceive their various services and overall performance? In order to get a more thorough picture, we used different questions and methods to solicit information. The first method was to ask respondents to name their most and least favorite airlines and also their most and least favorite China trips. The results are summarized in the following Tables 6 and 7.

TABLE 6  
THE BEST AND THE WORST AIRLINES  
(N = 174)

	Frequency -----	Percentage [*] -----
<u>The Best Airline</u>		
Cathay Pacific	91	52
Singapore Airline	18	10
Dragonair	14	8
Japan Air Lines	9	5
<u>The Worst Airline</u>		
CAAC	140	88
Northwest Airlines	4	2
British Caledonian	2	1
United Airlines	2	1
<u>The Airline Involved in My Best China Trip</u>		
Cathay Pacific	77	57
CAAC	39	29
Dragonair	14	11
<u>The Trip Was</u>		
From HK to China	103	76
From China to HK	17	12
Within China	11	8
<u>The Airline Involved In My Worst China Trip</u>		
CAAC	127	97
Cathay Pacific	2	2
Dragonair	1	1
<u>The Trip Was</u>		
From HK to China	58	45
From China to HK	18	14
Within China	51	40

[\*] Excludes others, Don't Knows, etc.



TABLE 7  
FREQUENCY COUNT OF RESPONDENTS' REASONS  
GIVEN TO THEIR CHOICE OF CAAC

	WORST AIRLINE -----	WORST CHINA TRIP -----
Services (Various kinds)	112	56
Punctuality	47	63
Food and Beverage Services	20	8
Plane & Cabin Condition	8	11
Safety	5	2
Flight Schedule	4	3
Reservation	4	2

( N.B. Multiple answers are allowed for all questions )

Out of the 174 respondents, 52% of them rated Cathay Pacific as the best airline, followed by Singapore Airlines, Dragonair and Japan Airlines. Only 4 people (2%) rated CAAC as their favorite airline, but 88% of them rated CAAC as the worst airline. Such a number is really something! Most people rated it as the worst because of the services quality which includes both the ground services and the in-flight services. The next most common reason is the punctuality problem.

Concerning the best China trip, even though CAAC operates a majority of the regional routes (between Hong Kong & China) and all the domestic routes, only 29% of the respondents rated CAAC as the best one. Cathay Pacific, on the other hand, received praises from 57% of respondents though they operate only two air routes -- between Hong Kong & Shanghai and between Hong Kong and Beijing.

As to the worst China trip, nearly all (97%) respondents cited CAAC. The reasons for the choice are basically the same as previously mentioned. Most trips were the Hong Kong to China routes (45%) and domestic routes (39%).



The second method we used was to ask the respondents to directly rate CAAC on the various criteria (Q.13). The result is summarized in Table 8.

TABLE 8  
MEAN VALUE OF THE VARIOUS FACTORS ABOUT CAAC

( From 1 = Very Good, to 4 = Very Poor )

	Mean -----	> 2.5 -----
Punctuality	3.41	*
Meals and Drinks Services	3.12	*
In-Flight Service	3.07	*
Ease of Reservation	3.00	*
Ground Service	2.95	*
Cabin Cleanliness & Tidiness	2.84	*
Flight Schedule	2.70	*
Safety	2.67	*
Price	2.53	
Overall Satisfaction	3.05	*

\* denotes the corresponding mean is significantly more than 2.5 at  $p = 0.05$

From Table 8, we can conclude that CAAC does not do a good job on any criteria. All the mean values are in the range between 2.5 to 3.2 and (except for pricing) all are significantly more than 2.5, which denotes a poor performance. There would seem to be an implication that, in all of this, most people travel on CAAC not because they like CAAC, but because of no other choices. But what if there exists some other choices?

We looked at Cathay Pacific as a contrast, because it is and will also be the major competitor of CAAC in most regional routes (between Hong Kong and China). A summary of Cathay's performance is shown in Tables 9 and 10.



TABLE 9  
MEAN VALUE OF THE VARIOUS FACTORS ABOUT CATHAY PACIFIC

( From 1 = Very Good, to 4 = Very Poor )

	Mean	< 2.5
	-----	-----
In-Flight Service	1.66	*
Safety	1.66	*
Cabin Cleanliness & Tidiness	1.70	*
Meals and Drinks Services	1.72	*
Punctuality	1.78	*
Ground Service	1.85	*
Ease of Reservation	1.86	*
Flight Schedule	2.02	*
Price	2.02	*
Overall Satisfaction	1.81	*

\* denotes the corresponding mean is significantly less than 2.5 at  $p = 0.05$

TABLE 10  
FREQUENCY COUNT OF RESPONDENTS' REASONS  
GIVEN TO THEIR CHOICE OF CATHAY PACIFIC

	BEST AIRLINE	BEST CHINA TRIP
	-----	-----
Services (Various kinds)	91	83
Punctuality	11	11
Food and Beverage Services	6	8
Plane & Cabin Condition	4	4
Safety	2	-
Flight Schedule	3	-
Reservation	1	-

( N.B. Multiple answers are allowed for all questions )

From Table 9, we can see that Cathay Pacific does quite a good job in all factors to satisfy passengers. Respondents gave each criterion a rate between 1.6 to 2.0 and all of them are significantly more than 2.5 which denotes a good performance. The implication is, unlike CAAC, passengers fly Cathay Pacific because they enjoy traveling with them.



Among all the factors, passengers rated in-flight service and safety as Cathay's strongest points.

Following in-flight service and safety, cabin condition, punctuality, meals and drink services came next as Cathay's strengths in winning satisfaction from customers.

What is CAAC's performance on each criterion when compared with Cathay's? In order to make a meaningful analysis, we adopted a paired t-test method. We selected those respondents who had rated both CAAC and Cathay Pacific in the same questionnaire and to test whether there exists significant differences between their two ratings. The result is summarized in Table 11.

TABLE 11  
COMPARISON OF RESPONDENTS' RATING BETWEEN  
CATHAY PACIFIC AND CAAC

( From 1 = Very Good, to 4 = Very Poor )

(N = 144)

	CAAC -----	Cathay Pacific -----	Paired T-Test Result -----
Punctuality	3.41	1.78	*
Meals and Drinks Services	3.12	1.72	*
In-Flight Service	3.07	1.66	*
Ease of Reservation	3.00	1.86	*
Ground Service	2.95	1.85	*
Cabin Cleanliness & Tidiness	2.84	1.70	*
Flight Schedule	2.70	2.02	*
Safety	2.67	1.66	*
Price	2.53	2.02	*
Overall Satisfaction	3.05	1.81	*

\* - There exists a significant difference between the two groups at  $p = 0.001$ .



From Table 11, we can conclude there exists significant differences between the two groups at  $p=0.001$ . Cathay Pacific outperforms CAAC on all criteria.

Currently, the whole China aviation market is a buyer's market; demand is far greater than supply - both in regional and domestic routes. CAAC operates all the domestic flights and a majority of the regional routes ( According to the February 23, 1989 issue of Far Eastern Economic Review, CAAC operates 63 regional flights with a total of 11,438 seats a week while Cathay Pacific operates 8 scheduled flights with 2,344 seats and Dragonair operates 31 chartered flights with 3,906 seats)

Under such a market situation, even though its competitor Cathay Pacific is so strong in all aspects, CAAC will hardly sense any threats from its present standard of operation. But, what if the market situation changes? For example, a more possible change is that there will be more flights a week all around to meet the market demand. Would passengers will still choose CAAC?

It seems manifest that CAAC needs to do something to change their ways; otherwise future prospects could well be clouded. But, before exploring possible solutions to the various problems, let us first of all go to the root and scrutinize the causes of these problems. In the next section, we will analyze each problem in detail.



### Analysis of Findings

From the previous sections, we can clearly see that CAAC did poorly on all criteria. But, what are the factors contributing to such a situation? In this section, we will analyze the problems one by one based on the previous research findings and also the information from interviews with industry experts and secondary data research.

#### (1) Punctuality

Punctuality includes all the problems of flight delay; flight change and cancellation; and plane change. Because of the prevalence of this problem, many people call CAAC "China Airlines Always Cancels". Why can't they do better to assure flight regularity? Some experts told us that two major factors contribute most to such a problem, and that changes could hardly be made in the short run.

The first factor is the condition of their planes. Most CAAC planes have been used for a long time; some are already more than 30 years old. Old planes clearly have more engine problems, and that requires extended check-up and on-spot maintenance.

The second factor is the air traffic control system. The basic equipment now in use is a 1953-vintage Soviet-made system. With the tremendous increase of traffic in recent years, such a system can no longer safely meet China's needs. Although CAAC considers investment in these systems a high priority, the many financial constraints hinder the speed of modification. Besides, such a problem is further complicated by the fact that they are not coordinated in these equipment purchases; there are at least five different vendors supplying eight different airports.



## (2) Various Services

These include all the services starting from reservations until the time a passenger leaves the airport. Owing to the different social system; different management philosophy; the lack of a "service 'marketing concept'"; and the lack of an incentive to do a good job, most flight attendants do not share the same values as their counterparts in the other countries. Even though their motto is "People's aviation is for people", CAAC people seldom handle their customers well. The symptom of "do well or not is still 36 bucks" is still prevalent.

Concerning meals and drinks, experts told us that they are spending less than a third of the money currently spent by other airlines on a per passenger basis. Given this, and the ideas spelled-out in the previous paragraph, the meals and drinks problem can be grasped.

## (3) Ease of Reservations

Reservations have never been an easy thing for CAAC passengers to cope with. Getting a ticket and confirming a seat are always time-consuming and frustrating. Two major factors cause the problem. First, demand is always greater than supply in most routes. Since China opened up its market in 1979, air flight demand started to increase rapidly but the supply is still far far behind. Moreover, problems are further complicated by the unfathomable ticket-selling-priority system.

Second, except for Beijing, Guangzhou, Shanghai, Hong Kong and most overseas offices, reservations are still handled manually. The results are what one might expect from a manual system which has to handle thousands of customers a day.



#### (4) Cabin Conditions

As mentioned in the previous paragraphs, most CAAC planes are old and lack maintenance. Except for the very new airplanes, it is not difficult for a passenger to experience water dropping from the air conditioning system above his head. (Some planes even do not have a proper air conditioning system)

It is also easy to find dirty and broken carpets and seats, and malfunctioning seat belts and bathrooms. In addition, owing to the loose regulations about hand carry-ons, the situation easily becomes unimaginable when some passengers bring in live poultry, rotten vegetables and stinky unknown products. The reasons are that airplane maintenance is not emphasized, and that regulations are not well developed. As noted, the "service 'marketing concept'" is quite embryonic, if alive at all.

#### (5) Flight Schedule Convenience

Owing to the limited number of planes and primitive airport facilities, flight schedules become an unavoidable problem. On routes between major cities like Guangzhou, Shanghai and Beijing, the number of flights is still tolerable. But to other places, one may have to wait for two or three days before one can catch the next flight. Therefore, if one has to go to a place for certain business matters, one often gets a few days of "vacation" before the business starts.

Besides, airport support services are also inadequate. Passengers can be frustrated when they arrive in a place not at a scheduled time or late at night (due to delays). This is because there may not be any proper means of transportation to carry them to their destination.



## (6) Safety

According to the previous statistical analysis, safety was found to be the most important factor for a passenger in choosing an airline. However, the perceived safety of CAAC is currently very poor. Before going into the analysis of the reasons behind such a symptom, let us first of all go over some of the major accidents involving CAAC. (Sardonically, some believe that CAAC means "China Airlines Always Crashes".)

In March 1979, about 200 people were believed killed when a military Trident crashed into a factory in a Beijing suburb. But the Chinese Government never officially confirmed the accident. In April 1982, a Trident crashed into a 600 metre high mountain in Guilin in southwestern Guangxi province. It was China's most serious aviation disaster, as there were no survivors among 112 passengers, which included 52 Hong Kong residents and two Americans. The cause of the accident was attributed to bad weather and a miscalculation by the Guangdong Aviation Bureau.

In December of 1982, an Ilyushin 18 forced-landed at the Guangdong airport, killing 23 people, including three from Hong Kong and two foreigners, and injuring 30 others. The plane burst into flame on landing, and CAAC later said that a discarded cigarette butt caused the fire.

In April 1983, a plane enroute to Hongkong from Guangzhou crashed just after takeoff, killing all eight people on board, including five oil exploration engineers and three crew members.

In September of the same year, a Chinese military jet collided with an airline on the runway of Guilin airport resulting in the deaths of ten passengers. Cause: "Neglect of traffic rules" by the military pilot.



In January 1985, a Soviet-built Anotov-24 on a flight from Shanghai to Beijing crash landed at a stopover in Jinan, killing 38 passengers. Poor weather, pilot error and extremely backward aviation guidance equipment were blamed for the crash.

In December 1986, another Anatov-24 crashed while trying to land during snow and hailstorm in Gansu province, killing six of the 44 people on board. Officials said the crash was caused by mechanical problems caused by cold weather.

On June 16, 1987, a Boeing 737 chartered flight collided with a fighter plane from Fuzhou, Fujian, killing the fighter pilot and injuring two passengers.

On January 18, 1988, an Ilyushin-18 crashed near Chongqing, Sichuan province, killing all 98 passengers and ten crew members. The plane crashed, said officials, after one engine caught fire and another malfunctioned. The cause of the crash was attributed to lax maintenance by Beijing airport workers.

On August 31, 1988, a Trident crashed on landing at Kai Tak airport, killing one passenger and six crew members. This was the very first CAAC accident outside mainland China.

On January 22, 1989, China's secretive civil aviation authority has revealed that 172 people were killed in five Chinese plane crashes in 1988 --- a much higher figure than previously reported in the country's official media.

Despite all these accidents, Lu Ruiling, director of CAAC's international affairs, claimed that the airline's accident rate, compared with foreign companies, is low. Most travel-industry analysts, however, disagreed and argued that China has given few details of other small accidents and actual maintenance and accident statistics, closely guarded by China, are not available.



Nevertheless, given the vast area but low flight frequency, the accident rate is still considered high. What are the major causes of these accidents?

The first major reason is once again due to the poor plane condition and the primitive maintenance work. From the above history, we can easily trace that most accidents involved old planes. These planes have been discarded by many other airlines, but to CAAC, they are still the major fleet. The degree of accident proneness is therefore, undoubtedly, higher.

Moreover, maintenance work is an unknown to outsiders - the availability of enough technology and competence of expertise are still questions. Nevertheless, it is further complicated by the fact that there are more than 40 different kinds of airplanes in CAAC. How can they have spare parts for all these planes dotted around the countryside, let alone their overseas stops?

The next reason is the lack of modern navigational aids and airport facilities. In many airports, CAAC is still trying to avoid collisions simply by allowing sufficient time intervals between scheduled flights, rather than using advanced equipment.

The final factor is the competency of the pilots. It is not hard to find passengers who have had horrible takeoff, flying, and landing experiences with CAAC. Even though the official claimed that over 80% of the pilots are graduates of civilian-run flying schools, most people still believe most of the present pilots are old MIG pilots who have the inbred contempt of some soldiers for civilians. Concerning the civilian-run flying schools, the 40 different types of aircraft also add problems to the training of pilots. It is because they need 40 different flight simulators for training the pilots



### (7) Price

Traveling by air (CAAC) was a very good deal because of its relatively low prices, especially to overseas Chinese. These people, include those from Hong Kong, Macau and Taiwan, had paid the same fares as mainlanders on domestic flights. 50% less than non-Chinese passengers.

On July 20, 1988, China's State Council decided to axe discounts on domestic fares for overseas Chinese. The General Manager of the Hong Kong CAAC branch, Zhang Rhuipi, said although the withdrawal of discounts would have some effect on overseas Chinese arrivals, the new system would help alleviate CAAC's over-burdened domestic network. "The low fare system is disadvantageous to aviation development in the long-run," he said, adding that he had received no complaints from travel agents.

Fares have since more than doubled. The fare from Guangzhou to Beijing has risen from HK\$450 to \$1,380, while a seven-day tour to Beijing has increased from \$2,500 to more than \$4,600. The current price per kilometer has already climbed up to the international level and people have started to query the value for money issue. All these, we believe, contribute to the low rating of CAAC on pricing criterion.

Besides, price discounts by many airlines are a very common practice -- both to the travel agencies and passengers. However, CAAC has not had such a practice. Even though they recently started to give discounts to travel agencies, it is still below the industry standard and with much red tape.



## CHAPTER V

### SUMMARY AND RECOMMENDATIONS

From the above analysis, we may conclude that CAAC does have many marketing problems.

But these also offer great opportunities to them.

These problems are a compound of many societal, organizational and technical elements.

Yet, many things could be done now.

Because there are often no other means to get to your destination quicker than by CAAC, people (especially businesspeople) will still take CAAC even though it is doing a poor job. As changes will involve much cost but will not contribute much to revenue and profit, why do they have to change? In the short run, such a thought may be valid, but in the long run, such a situation will result in much harm to the company itself as well as to the speed of modernization in China.

Why is that so? The following paragraphs will examine the reasons behind one by one.

#### (1) CAAC Must Change To Meet Market Demand And Competition

As reflected in the previous discussion concerning the performance of the two airlines, most respondents did not enjoy traveling with CAAC. Cathay Pacific was found to be better than CAAC in all aspects.

Currently, the whole China aviation market is a buyer's market; demand is growing far greater than the supply can meet. However, CAAC still operates all the domestic routes and most of the regional routes. Thus, its poor performance may not harm them because customers do not have that many other choices.



But what if the market situation changes some day? What if there are more other choices? As China continues to open up its market, such a situation is very possible: more foreign airlines flying to, from, or even within China. If CAAC does not start to improve its operation, one may predict that people will switch to other airlines, like Cathay Pacific or Dragonair.

Thus, CAAC must start to improve its various operating standards to meet the market demand and competition; otherwise its business will be greatly affected.

## (2) Quicker To Solve The Transportation Needs

Transportation has been a problem to China for thousands of years because of its vast continent-sized land mass. Most of the other current transportation means are inefficient and far behind the market demand - both for passengers and freight.

In order to meet the needs as quick as possible (it also helps the GNP), one may suggest that something must be done now. The development of a better air transportation system, though it would involve a great cost, would also involve much less time than for a railroad, and its payback period would be quicker.

Unlike renovating highways or railroads that requires numerous human resources and has to deal with the deserts, rivers, and mountains problems, improving air transport requires only airport renovation and aircraft purchases.

In general, it needs at least two to four millions RMB and takes at least two years to build 100 kilometers of railroad, and the payback period is at least twelve years. What would you expect to rebuild the railroad from Guangzhou to Lhasa? Or from Urumqi to Beijing?



### (3) It Facilitates Tourism

China is such a beautiful place that many people want to come and visit. But, as Goldsmith cited in his article "To Fly or Not to Fly", a poor transportation system deters them, and drives them away to other places. In 1985, China only accounted for 3% of the world's total tourism, and earned even less than a small country like Singapore or Thailand.

Tourists, in general, demand fast and comfortable means of traveling. With proper development of an air transport system, many more tourists would certainly consider in coming.

### (4) It Earns Foreign Exchange

China needs foreign exchange more than many other countries because of the many huge projects it is undertaking. Since most passengers are foreigners, a better ability to meet their needs means more foreign exchange to the country. It probably earns foreign exchange more cleanly and quickly than any other means.

### (5) It Facilitates Trade

To most businesspeople, efficiency means money. The current services provided by CAAC are far behind the requirements of many businesspeople. Not only does it affect their ease of travel, but also affect, their willingness to invest, because their products or services also need efficient transportation means.

Moreover, China has just opened up fourteen coastal cities for more business opportunities. Good air transportation will certainly contribute much to the further development. Li Peng, Vice Chairman of the State Council once said, "To develop a product economy, transportation is the first priority."



During the formulation of the Seventh Five-Year-Plan, Zhao Ziyang also commented that, "From now on, we have to better utilize civil aviation. Buy more airplanes and rebuild the airports. The current utilization rate is too low and we must increase the flight schedule." State Secretary Hu Yaobang also mentioned that, "we will pause on the work of the Tibet railroad, but put more emphasis on the development of public transportation and aviation industry."

It is therefore high time for CAAC to change and better serve its people, because "People's Aviation is for people." The direction should be what the Late Premier Zhou Enlai said in the 1950s, to secure "safety, regularity and high-quality services." The following are our suggestions to CAAC.

#### (1) Organizational Changes To Increase Operating Efficiency

In late 1984, CAAC announced its intent to evolve into a regulatory body, allowing new airlines to assume its former function as the sole national airline. But, news concerning the restructuring has not yet been officially released, and nobody knows what in reality has happened, especially what relationship still exists between the government, CAAC, and the companies.

We suggest that government intervention must be maximally cut off from these individual companies. CAAC should remain the regulatory body, and maintain the airports, while individual companies run the airlines only and no more. The relationship with these companies should be limited to tax and regulations. Except for some major decisions, these companies should have the maximum autonomy in running and decision making, or else such a change will result in nothing significant.



## (2) Encourage Competition To Raise Operating Standards

Inter-airline competition should be encouraged by the government department concerned. This is because only competition will result in improved services. The government, however, should set up some rules of the game to ensure that such competition will benefit the country as a whole: the economy in general, the companies and the passengers.

## (3) Improve Airport Facilities To Increase Flight Capacity And Reduce Punctuality & Safety Problems

As discussed before, most punctuality and safety-related problems are a product of the primitive airport facilities and equipment. Besides, it also affect the operating capacity of the airlines. Unless the airports are well equipped with advanced communication and landing systems, the supply of new planes can hardly make a dent in meeting the current and coming demand. But how can all the airports be modified in such a short time? Where will the money come from?

Airports should be renovated as a first priority. Major tourist and commercial cities should be handled first, then the rest. In order to speed up the modification, CAAC may consider joint ventures with other third parties.

In order to minimize the compatibility problems, equipment purchase should be centrally and properly planned; and limited to a few vendors only...or the maintenance cost and problem will outweigh the benefits gained from having many vendors.

Besides, government should encourage vendors to transfer technology to China and produce them in China. Since the demand is so great, such a deal would surely be attractive.



#### (4) Proper Airplane Allocation and Purchase Plan - Reduce Pilot Training and Maintaining Problems

During the restructuring, CAAC should be careful in allocating the planes to each company so that each owns as few different models as possible. Such a policy will ease the burden of future pilot and flight attendant training, and also reduce the expertise and spare parts needed for each model.

As CAAC already has a joint venture with McDonnell Douglas in producing the MD-82, future purchases should stick to this model, because CAAC now has already acquired the expertise in manufacturing as well as maintenance.

#### (5) Improve Airplane Maintenance

At present, airplane repair and maintenance technology is very low. It normally takes 3 to 4 times more time than the Western counterparts. Such a technology will certainly affect safety, plane utilization, and flight regularity.

We suggest that CAAC should operate the maintenance plant and provide services to the airlines on a contract basis. The reasons behind this are, first, initial investment is so great that it becomes financially unfeasible to the operating airline companies; secondly, the operating cost is smaller when these plants are operating on a larger scale.

But where will the technology and money come from? One source, obviously, is from the joint venture between CAAC and McDonnell Douglas. Another source could be by joint ventures with third parties involving technology transfer. An example is the US\$30m plant in Baiyun airport of Guangzhou, which is owned by CAAC Guangzhou, Lockheed (U.S.) and Hutchison (Hong Kong).



## (6) Human Resources Development

In order to improve the quality of service, there must be a good human resources training and development program. At the present moment, CAAC (as well as each company) desperately needs three kinds of people: management people, engineers (including pilots) and flight attendants.

Resembling the hotel industry, two things could be done now. First, they can send the present instructors overseas to better equip them to a professional level; second, hire overseas experts to train the staff in China.

Besides proper training and knowledge acquiring, good personnel policies are also vital to the work of these quality people. There should be good promotion prospects as well as enough financial incentives for each team, or individual. Otherwise, "Do well or not still 36 bucks" will still dominate.

## (7) Reservation System

A good reservation system is a must to the success of any airline. The present manual (and primitive) reservation system can no longer well serve the rising demand, both to the local people and overseas travelers.

Since computerization today involves less cost than ever before, due to precedents, and there exist no reasons for still doing simple jobs through inefficient and outdated means.

Besides the computerization of the reservation system, the other necessary improvement is the rationalization of the already-cited unfathomable ticket selling and complicated confirmation procedures. The current situation is chaotic. A fair and simple system is a must for efficient operation.



#### (8) Flight Schedule

The current flight schedule, obviously, is far behind the customers demand. However, unless there are -- obviously -- more planes with a more efficiently operated airport network, nothing can be significantly done at the present moment.

Once these factors have been handled, there exist no reasons why CAAC should not increase the frequency, so as to better serve customers, and make a bigger profit. Experts told us that maximum profit could be earned when the load factor is around 65% to 75%.

#### (9) Pricing Policy

Since the current market demand is far greater than the supply can meet, the current pricing policy is still acceptable. What they should consider now is a discount policy adjustment.

As competition becomes more severe in most international and regional routes, they should consider adjusting the pricing as well as the discount policy (especially to the travel agencies) so as to remain competitive with the other airlines.

#### (10) Promotion

CAAC has so far done little on promotion. Except for the glossy in-flight magazines which are full of glowing reports about CAAC, nothing significant has been done. But it is high time for them to improve its poor reputation. What they need is large-scale public relations work and image promotion, especially in Hong Kong ... all linked, of course, to improvements of standards of the airline itself. Otherwise, it will gradually lose its competitiveness.



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APPENDIX

COPY OF THE QUESTIONNAIRE



問 卷  
QUESTIONNAIRE  
-----  
(Version 1.03A)

Questionnaire : ----- [1-3]

Interviewer : -----

Date & Time : -----

( Site : 1. CX / 2. CA ) [4]

早晨 / 午安 / 晚安：我是中文大學的學生，現正做緊一份有關航空業的調查，請問你介唔介意用幾分鐘時間回答幾條問題？

Good Morning / Afternoon / Evening! I am a CUHK student and currently doing a survey on the airline industry. Would you mind spending a few minutes to answer just a few questions?

請問你是否準備乘搭飛機去中國大陸？

1. Are you going to take a plane to China ?  
(If No, then STOP !)

1. Yes / 2. No [5]

在88年期間，你搭過幾多次飛機？

2. How many times did you travel by plane in 1988?  
( If less than 3, then STOP !)

----- [6-7]

在88年期間，你搭過幾多次飛機來往香港及大陸？

3. How many times did you travel between Hong Kong & China  
by plane in 1988? ( If less than 2, then STOP !)

----- [8-9]

請問在88年期間，你總共坐過哪幾間航空公司的飛機？

4. How many different airlines have you traveled with  
in 1988? (If less than 2, then STOP !)

----- [10-11]

從你所搭過咁多架唔同航空公司的飛機中，你認為哪間航空公司係最好呢？點解？

5. Among all the airlines you have traveled with, which  
one do you consider as the best and why?

最好的航空公司是

The best airline is : ----- [12-13]

原 因 是

The reasons are : -----



哪間航空公司你認為最差呢？點解？

6. And which one is the worst and why ?

最差的航空公司是

The worst one is : \_\_\_\_\_ [14-15]

原因 是

The reasons are : \_\_\_\_\_

當你只考慮飛行來往中國大陸或中國內陸線的航程時，在88年中你認為哪一程係最好的？

7. Thinking only about air trips to, from or within China, which was the best one you had in 1988 ?

這程 是 坐

The trip was flown on \_\_\_\_\_ [16]

飛 機 由

The trip was from \_\_\_\_\_ 飛去 to \_\_\_\_\_ [17-18]

原因 是

The reasons are : \_\_\_\_\_

哪一程係最差的？

8. Which was the worst one you had in 1988 ?

這程 是 坐

The trip was flown on \_\_\_\_\_ [19]

飛 機 由

The trip was from \_\_\_\_\_ 飛去 to \_\_\_\_\_ [20-21]

原因 是

The reason was : \_\_\_\_\_

試舉出二個困難或問題是在你乘搭飛行來往中國或中國內陸線時所遇到的。

9. What kinds of problems, if any, would you say that you've encountered most in flying to, from and within China ?

1. \_\_\_\_\_

2. \_\_\_\_\_



- 在選擇乘搭機飛的時候，下列因素之重要性如何。 \*\* [出示咭#1]
10. For each of the following criteria, please indicate the level of importance in choosing an airline. \*\* [Show Card #1]

1. - Very Important 非常重要
2. - Important 重要
3. - Unimportant 不重要
4. - Very Unimportant 非常不重要

a. Ease of Reservation 訂購機票之容易程度	1	2	3	4	[22]
b. Flight Schedule Convenience 班機及航線之方便程度	1	2	3	4	[23]
c. Price 價錢(價格)	1	2	3	4	[24]
d. Ground Service 地勤服務	1	2	3	4	[25]
e. In-flight Service 機內服務	1	2	3	4	[26]
f. Cabin Tidiness & Cleanliness 機艙整潔	1	2	3	4	[27]
g. Meals and Drinks Service 食物及飲品	1	2	3	4	[28]
h. Punctuality 準時性	1	2	3	4	[29]
i. Safety 安全性	1	2	3	4	[30]

請問你有沒有乘搭過中國民航的班機？

11. Have you ever flown on CAAC ?  
( If No, skip to Q.14 )

1. Yes / 2. No. [31]

在88年期間，你乘搭過多少次中國民航？

12. How many times have you taken CAAC in 1988 ?

首先，飛行於中國內陸

First of all, flying within China ?

----- [32-33]

由香港來往中國大陸

How about in and out of China ?

----- [34-35]

一般來說，根據以上每一個標準，你會怎樣評定中國民航的服務。

13. In general, how do you rate CAAC in each of the following criteria. \*\* [Show Card #2]

1. - Very Good 非常好
2. - Good 好
3. - Poor 差
4. - Very Poor 非常差

a. Ease of Reservation 訂購機票之容易程度	1	2	3	4	[36]
b. Flight Schedule Convenience 班機及航線之方便程度	1	2	3	4	[37]
c. Price 價錢(價格)	1	2	3	4	[38]
d. Ground Service 地勤服務	1	2	3	4	[39]
e. In-flight Service 機內服務	1	2	3	4	[40]
f. Cabin Tidiness & Cleanliness 機艙整潔	1	2	3	4	[41]
g. Meals and Drinks Service 食物及飲品	1	2	3	4	[42]
h. Punctuality 準時性	1	2	3	4	[43]
i. Safety 安全性	1	2	3	4	[44]
j. Overall Satisfaction Derived 總括滿意程度	1	2	3	4	[45]



請問你有沒有曾經乘搭過國泰航空的班機

14. Have you ever flown on Cathay Pacific ?  
[If No, Skip to Q.17]

1. Yes / 2. No [46]

15. 在88年中，你搭過多少次國泰的班機？同時其中有多少次是飛中國線的？  
How many times have you taken Cathay Pacific in 1988, and how many of them are China route ?

總 共  
In Total ----- 47-48

來 往 中 港  
China Route ----- 49-50

用同樣的標準，一般來說你會怎樣評定國泰的服務。

16. Using the same scale, in general, how do you rate Cathay Pacific in each of the following criteria. \*\* [Show Card #2]

a. Ease of Reservation 訂購機票之容易程度	1	2	3	4	[51]
b. Flight Schedule Convenience 班機及航線之方便程度	1	2	3	4	[52]
c. Price 價錢(價格)	1	2	3	4	[53]
d. Ground Service 地勤服務	1	2	3	4	[54]
e. In-flight Service 機內服務	1	2	3	4	[55]
f. Cabin Tidiness & Cleanliness 機艙整潔	1	2	3	4	[56]
g. Meals and Drinks Service 食物及飲品	1	2	3	4	[57]
h. Punctuality 準時性	1	2	3	4	[58]
i. Safety 安全性	1	2	3	4	[59]
j. Overall Satisfaction Derived 總括滿意程度	1	2	3	4	[60]



17. Classification Data \*\* [Show Card #3]

a. Sex (By Observation) 性別 (觀察) [61]

1. Male 男 2. Female 女

b. Nationality (Passport) 國籍 (護照) [62]

- |                          |                                 |
|--------------------------|---------------------------------|
| 1. Hong Kong citizen 香港  | 6. Japanese 日本                  |
| 2. Taiwan Chinese 台灣     | 7. South East Asian 東南亞         |
| 3. Mainland Chinese 中國大陸 | 8. Australians & New Zealanders |
| 4. American 美國           | 9. Other 其他                     |
| 5. European 歐洲           |                                 |

c. Age (As at your last birthday) 年齡 (以最近之生日為準) [63]

- |             |             |
|-------------|-------------|
| 1. Below 25 | 4. 45-54    |
| 2. 25-34    | 5. 55-64    |
| 3. 35-44    | 6. Above 64 |

請問以下哪一項為最適宜形容你現在的年薪。

d. Please read to me the number that best describes your annual income [64]

- |                              |   |                         |
|------------------------------|---|-------------------------|
| 1. Less than HK\$80,000      | / | Less than US\$10,000    |
| 2. HK\$ 80,000 - HK\$199,999 | / | US\$10,000 - US\$24,999 |
| 3. HK\$200,000 - HK\$399,999 | / | US\$25,000 - US\$49,999 |
| 4. HK\$400,000 - HK\$599,999 | / | US\$50,000 - US\$79,999 |
| 5. HK\$600,000 or more       | / | US\$75,000 or more      |

e. Occupation 職業 [65-66]

1. Entrepreneur 企業家
2. Manager 經理
3. Professional 專業人士
4. Technical 技術人員
5. Factory Worker 工廠工人
6. Clerk / Secretary 文員 / 秘書
7. Salesperson 推銷員
8. Teacher / Academician 教師 / 學者
9. Housewife 家庭主婦
10. Student 學生
11. Retired 退休人士
12. Other : \_\_\_\_\_

你旅行的目的多數是甚麼？

f. What is the purpose for your most travel ? [67]

1. Business 商業性質
2. Visit friends / relatives 探親
3. Vacation Travel 旅遊
4. Conference 開會
5. Others : \_\_\_\_\_







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